



**Illinois Emergency Management Agency  
Division of Nuclear Safety**

**A Guide for  
Illinois  
Accreditation  
Requirements  
in  
Medical Radiation  
Technology**

Rod R. Blagojevich  
Governor

Andrew Velasquez III  
Director

## **CONTENTS**

<b>1. Introduction .....</b>	<b>3</b>
<b>2. Who Must Be Accredited .....</b>	<b>3</b>
<b>3. Categories of Accreditation .....</b>	<b>3</b>
<b>4. Types of Accreditation / Accreditation Requirements .....</b>	<b>4</b>
<b>5. Issuance of Accreditation .....</b>	<b>6</b>
<b>6. Continuing Education (CE) .....</b>	<b>8</b>
<b>7. Documentation of CE .....</b>	<b>10</b>
<b>8. Approval of CE .....</b>	<b>11</b>
<b>9. Training / CE Requirements for Mammographers .....</b>	<b>11</b>
<b>10. Common Questions, Problems and Issues.....</b>	<b>12</b>

## ***INTRODUCTION***

The Illinois Emergency Management Agency's Division of Nuclear Safety is devoted exclusively to nuclear and radiological issues. Its fundamental responsibility is to protect Illinois residents from health hazards associated with radiation exposures. In August, 1982, the Illinois General Assembly amended the Radiation Protection Act and authorized the Agency to set and enforce minimum standards of training and experience for persons who apply ionizing radiation to human beings.

## ***WHO MUST BE ACCREDITED***

The Radiation Protection Act applies to all persons who apply ionizing radiation to human beings unless they are specifically exempted, which includes the following:

Physicians, chiropractors, podiatrists, dentists, dental hygienists, dental assistants, podiatric assistants, operators of bone densitometry units, persons who practice medical radiation technology in federal facilities, persons who practice medical radiation technology under the supervision of a person licensed by the Medical Practice Act of 1987 when such practice is performed on employees of a business at a facility owned and operated by that business, students who are enrolled in an approved program and persons who are registered with the Agency as students-in-training in limited diagnostic radiography.

Physician assistants, technologists, nurses and other assistants who perform radiologic technology must be accredited. The Radiation Protection Act also requires employers to assure that only accredited persons are employed to perform radiation procedures.

## ***CATEGORIES OF ACCREDITATION***

Accreditation is issued in six categories of medical radiation technology:

- A. Medical Radiography - The science and art of applying x-radiation to human beings for diagnostic purposes.

- B. Nuclear Medicine Technology - The science and art of in-vivo and in-vitro detection and measurement of radioactivity and the administration of radiopharmaceuticals to human beings for diagnostic and therapeutic purposes.
- C. Radiation Therapy Technology - The science and art of applying ionizing radiation emitted from x-ray machines, particle accelerators and sealed radioactive sources to human beings for therapeutic purposes.
- D. Chiropractic Radiography - The science and art of applying x-radiation to human beings for diagnostic purposes in chiropractic.
- E. Limited Radiography - A person, who, while under the supervision of a licensed practitioner, performs radiography in one or more of the following areas: Chest, Extremities, Skull/Sinuses or Spine.
- F. Radiologist Assistant - A person, other than a licensed practitioner, who as a medical radiographer with advanced-level training and certification, performs a variety of activities under the direct, general or personal supervision of a radiologist, certified by the American Board of Radiology or the American Osteopathic Board of Radiology, in the areas of patient care, patient management, clinical imaging and interventional procedures. The Radiologist Assistant may not interpret images, make diagnoses or prescribe medications or therapies. In order to be eligible for accreditation as a Radiologist Assistant the individual will need to be registered as a Radiologist Assistant by the ARRT or certified by the Certification Board for Radiology Practitioner Assistants.

## ***TYPES OF ACCREDITATION AND ACCREDITATION REQUIREMENTS***

Within the six categories of medical radiation technology, the Agency offers various types of accreditation. Each is issued for twenty-four months.

Active accreditation requires that the applicant has passed an examination approved by the Agency. The Agency does not administer examinations but accepts the examinations administered by nationally recognized professional organizations. This type of accreditation contains no conditions or limitations other than being specific to the field of medical radiation technology.

Temporary accreditation is issued to persons who have completed an approved training program, but who have not yet passed the required examination.

The Agency recognizes training programs for radiography, nuclear medicine, and radiation therapy based on standards accepted by the U.S. Department of Education. Programs approved by the Chiropractic Council on Education are recognized for chiropractic radiography. This type of accreditation is issued for two years and is non-renewable.

Conditional accreditation categories were established to recognize the practical experience of persons who were not formally trained, and to assure that the law does not impose undue burdens on communities where trained technologists are not available.

Conditional accreditation granted for reasons of community hardship (Type I) requires that the employer demonstrate that a hardship exists and that fully qualified technologists cannot be recruited. The burden of proof of community hardship is on the applicant and the employer. Personal hardship is not grounds for conditional accreditation.

Prior to September 7, 1990, persons with specific amounts of practical experience were accredited in the conditional category (Type II). This type of accreditation is no longer issued. It is, however, renewable if the continuing education requirements have been satisfied, and a Statement of Assurance has been provided by a licensed practitioner that the individual is competent to apply ionizing radiation to human beings.

Limited accreditation requires that the applicant has passed an examination as required by the Agency. The examination covers all subjects of radiologic science with specific sections structured for each category of limited accreditation. The examinations are scheduled by the Agency.

Employers may train persons in limited radiography, if they are first registered with the Agency as students-in-training in limited diagnostic radiography. However, the Agency now requires personal (in the room) supervision of the registered student by a physician or accredited medical or appropriately qualified limited diagnostic radiographer any time the x-ray beam is to be energized.

The following is a list of limited diagnostic procedures that may only be performed with a radiographic unit (fixed or portable) by type of limited accreditation:

#### Limited Medical Radiography - Chest

Chest: Routine PA and Lateral / Chest: Lateral Decubitus, Apical Lordotic, Obliques / Ribs

#### Limited Medical Radiography - Extremities

Fingers / Hand / Wrist / Forearm / Elbow / Humerus / Shoulder / Clavicle / Scapula  
Toes / Foot / Ankle / Lower Leg / Knee / Patella / Femur / Hip / Pelvis

#### Limited Medical Radiography - Spine

Cervical Spine / Thoracic Spine / Lumbar Spine / Lumbosacral Spine / Sacroiliac Joints / Sacrum / Coccyx / Pelvis

#### Limited Medical Radiography - Skull / Sinuses

Skull / Paranasal Sinuses / Mandible / Facial Bones

### ***ISSUANCE OF ACCREDITATION***

The Agency will issue an initial accreditation to any qualified individual upon receipt of a completed application and the required fee. Applications for accreditation may be obtained at [www.state.il.us/iema/radiation/accredit.asp](http://www.state.il.us/iema/radiation/accredit.asp) or by contacting us at 217-785-9913. Additionally, applicants for active accreditation must submit a copy of the applicable registry certificate: American Registry of Radiologic Technologists (ARRT), Nuclear Medicine Technologist Certification Board (NMTCB), American Society of Clinical Pathologist (ASCP), the American Registry of Chiropractic Radiologic Technologists (ARCRT) or the Certification Board for Radiology Practitioner Assistants (CBRPA).

New graduates applying for temporary accreditation must submit or have submitted proof of graduation (copy of diploma or letter from program director).

Renewal of accreditation, regardless of lapsed time period, requires receipt by the Agency of an application, and the appropriate fee. Conditional accreditation renewals require submission of a statement of assurance, unless one is currently on file with the Agency.

Technologists applying for initial or renewal of active accreditation are not required to maintain registry status (in good standing with ARRT, NMTCB, etc.). However, it may be a condition of employment.

Technologists who are no longer working in radiologic technology, or not employed in Illinois, may choose not to renew their accreditation. If so, no notification is required, nor does one need to return the renewal application. To reinstate an expired accreditation, regardless of its expiration date, simply complete the renewal process online or return the application with the appropriate fee.

On-line renewal of accreditation is also available, which may be submitted anytime after expiration and up to two months prior to expiration of accreditation. The online renewal login screen, which requires three identifiers: the accreditation number, social security number and date of birth, can be accessed at the following website: [www.state.il.us/iema/radiation/radtech/radtechlogin.asp](http://www.state.il.us/iema/radiation/radtech/radtechlogin.asp). Additional links to the Agency's accreditation forms and informational notices will appear at the bottom of the login screen.

The Agency does not utilize credit card payment options. Payment is made online from an active checking or savings account (routing and account numbers will be requested). These numbers are then subjected to an online verification process by the Automatic Clearing House (ACH) Network, which will quickly validate the routing and account numbers, and that the account is in good standing. There is an additional charge for this verification procedure of \$1.00, which will be collected by ACH. An individual will have three attempts to enter the correct banking information before the online process will terminate. Once the online renewal process is completed the technologist will be able to print a duplicate of the completed renewal form, as well as an authorization to work letter (if needed), which will be valid for ten days.

Presently, the Agency does not offer an online application process for initial applications. As such, most are submitted by mail. However, we can offer an expedited application process, via fax, upon receipt of a completed application and debit authorization form (direct debit from checking account). Information on this process is available at [www.state.il.us/iema/radiation/direct\\_debit.asp](http://www.state.il.us/iema/radiation/direct_debit.asp).

Most applications are processed, and the accreditation certificate mailed within one week of receipt. However, an immediate authorization to work can be issued upon receipt of a completed application and accompanying fee. When requesting an immediate work authorization, please provide a fax number and contact person.

## ***CONTINUING EDUCATION***

Continuing education (CE) is required for the renewal of all categories of accreditation. CE is defined as a learning activity that is planned, organized and administered to enhance the professional knowledge and skills underlying professional performance that a technologist uses to provide services for patients, the public or the medical profession. In order to qualify as CE, the activity must also provide sufficient depth and scope of a subject area.

To renew accreditation, except for limited categories, the applicant must have completed 24 hours of CE. Limited radiographers are required to accomplish 12 hours.

The Agency has eliminated the direct and indirect categories for CE and adopted the ARRT's options for satisfying CE. These options include:

Activities approved by the Agency

Activities approved by an ARRT Recognized Continuing Education Evaluation Mechanism (RCEEM). RCEEMs currently recognized by the ARRT include:

- American College of Radiology
- American Healthcare Radiology Administrators
- American Institute of Ultrasound in Medicine
- American Society of Radiologic Technologists
- Canadian Association of Medical Radiation Technologists
- Radiological Society of North America (RSNA)



- Section for Magnetic Resonance Technologist of the International Society for Magnetic Resonance in Medicine
- Society of Diagnostic Medical Sonography (SDMS)
- Society of Nuclear Medicine Technologists Section (SNMTS)
- Society of Vascular Technology (SVT)

Approved Academic Courses - Related academic courses are eligible for CE credit, provided they consist of a formal course of study from a post-secondary educational institution accredited by a mechanism recognized by the ARRT. Courses in the biological sciences, physical sciences, communication (verbal and written), mathematics, computers, management or education methodology are considered relevant. CE credit for academic courses will be awarded at the rate of 12 CE units for each academic quarter credit, or 16 CE units for each academic semester credit. Documentation must be in the form of an official transcript, which include both the month and the year the course was completed, and an indication that the class was passed (pass/fail) or a grade of “C” or better.

Advanced level exams – continued education credit is awarded for the successful completion of an additional primary or an advanced level or added qualifications exam.

## **EXAMPLES OF ADDITIONAL PRIMARY EXAMS THAT ARE APPROVED FOR CE CREDIT**

<b>EXAM</b>	<b>CE CREDIT VALUE (UNITS)</b>
Radiography through ARRT	24
Nuclear Medicine Technology through ARRT or NMTCB	24
Radiation Therapy through ARRT	24
Dosimetry through Medical Dosimetry Certification Board	24

Diagnostic Medical Sonography, Vascular Technology or Diagnostic Cardiac Sonography through the American Registry of Diagnostic Medical Sonographers (initial only)	24
---	----

## **EXAMPLES OF ADVANCED LEVEL OR ADDED QUALIFICATION EXAMS THAT ARE APPROVED FOR CE CREDIT**

<b>EXAMS</b>	<b>CE CREDITS VALUE (UNITS)</b>
Cardiovascular-Interventional Technology through ARRT	24
Mammography through ARRT	24
Computed Tomography through ARRT	24
Magnetic Resonance Imaging through ARRT	24
Quality Management through ARRT	24
Sonography through ARRT	24
Vascular Sonography through ARRT	24
Bone Densitometry through ARRT	24
Nuclear Cardiology through ARRT	24

CPR - certification in basic life support is no longer eligible for CE credits. However, advanced CPR certification (advanced life support, instructor or instructor trainer) will be eligible for 6 CE units. Only one of these options will be allowed each renewal period. A copy of a valid certification card issued by the American Red Cross, the American Heart Association, or the American Safety and Health Institute will serve as documentation.

## ***DOCUMENTATION OF CONTINUING EDUCATION***

All technologists will be required to maintain proof of participation in CE activities. Applicants for renewal, other than temporary accreditations converting to active, will be asked to attest on the application form that they have completed the required number of CE credits, and have the documentation to prove it. Technologists who are registered with the ARRT or the NMTCB and in compliance with CE requirements or on CE probation at the time of renewal with the Agency will be considered in compliance with CE requirements for renewal. This will eliminate any need for the registry or Illinois accreditation periods to coincide. Presently, 10 percent of all renewals are randomly selected by the computer for a CE audit by the Agency. In such cases, proof shall be requested in the form of a certificate or an itemized list from an approved record keeping mechanism (ASRT, SDMS, SNMTS). All documentation shall include:

- Dates of attendance
- Name of participant
- Name of sponsor
- Reference number (if activity approved)
- Title and content of activity
- Number of contact hours
- Signature of instructor or authorized representative of the sponsor

## ***APPROVAL OF CE ACTIVITIES***

The Agency will approve relevant CE activities if submitted 30 days in advance, with appropriate documentation. However, it will no longer approve tumor boards, cancer conferences, film chart reviews, etc, or courses required for OSHA or JCAHO compliance. As previously noted, programs which are approved by an ARRT Recognized Continuing Education Evaluation Mechanism (RCEEM) are acceptable for CE credit and require no additional approval by the Agency.

## ***MINIMUM TRAINING REQUIREMENTS FOR MEDICAL RADIOGRAPHERS PERFORMING MAMMOGRAPHY***

As referenced in Section 370.70(b) of the Agency's rules, technologists who perform mammography must have completed at least 40 contact hours of

documented training specific to mammography under the supervision of a qualified instructor. The hours of documented training shall include, but not necessarily be limited to: training in breast anatomy and physiology, positioning and compression, quality assurance or quality control techniques and imaging of patients with breast implants. Continuing education and experience requirements include the performance of a minimum of 25 examinations under the direct supervision of a qualified individual, at least 8 hours of training in each mammography modality used by the technologist in performing mammography exams, and fifteen hours of continuing education in mammography during any three year period. These hours may be used, in part, to meet their renewal requirement.

## **COMMON QUESTIONS, PROBLEMS AND ISSUES**

### ***What is meant by a “unit” of continuing education?***

A unit is an amount of continuing education equal to a 50-minute lecture. Activities other than a lecture may be counted toward the requirement.

### ***Is in-service education considered continuing education?***

In-service education may be appropriate for continuing education credit, but it must be approved by the Agency. Credit must be applied for 30 days in advance.

### ***If an applicant is accredited in two or more categories, must he or she complete continuing education in both?***

Yes. The continuing education requirement would apply in both categories. However, many activities would count toward both requirements at the same time.

### ***Is membership in state and national organizations necessary to earn continuing education credit?***

No. Although many of the courses and lectures are provided through these professional organizations, membership in them may not be necessary for participation in their continuing education programs.

### ***Is credit available for out-of-state meetings?***

The Agency does accept continuing education for out-of-state professional meetings. If the meeting is at a national level, one or more of the recognized

professional organizations will have assigned the program continuing education credit. Applicants will need to obtain verification of attendance from the out-of-state sponsor.

***Can we receive credit for self-directed learning activities?***

Self-directed study or self-learning activities, approved by ARRT recognized RCEEMS can be used for continuing education. Neither individual participants, nor their employers, may verify self-directed activities. These types of courses cannot be repeated for continuing education credit.

***Can I repeat a course or seminar and get credit again?***

Yes. However, the course or seminar can not be repeated in less than 24 months. Self-directed study programs cannot be repeated regardless of time lapsed.

***What general advice does the Agency have regarding continuing education and renewal?***

Applicants are advised to retain all grade transcripts, certificates of attendance, computer printouts, etc., for documentation of continuing education credit.

Notify the Agency of any change of name or address promptly.

**If you have any additional questions, or if we may be of further assistance, please contact us at:**

**ILLINOIS EMERGENCY MANAGEMENT  
AGENCY  
DIVISION OF NUCLEAR SAFETY  
TECHNOLOGIST ACCREDITATION PROGRAM  
1035 OUTER PARK DRIVE  
SPRINGFIELD, IL 62704  
217/785-9913  
217-/785-9946 (FAX)  
217/782-6133 (TDD)**